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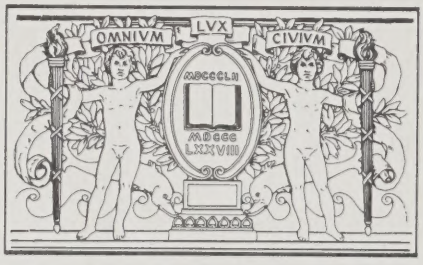

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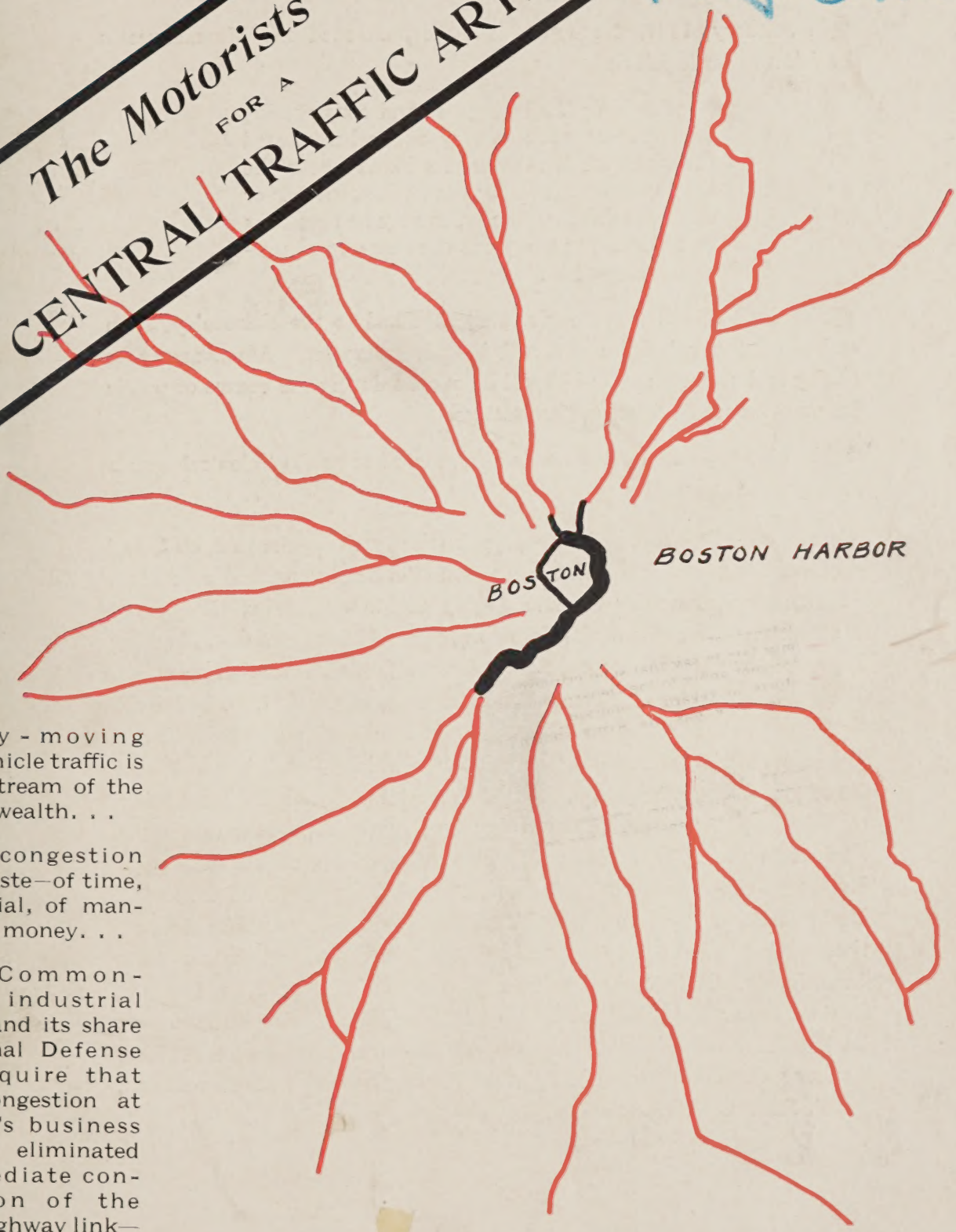
Motor Traffic Figures
111, 12
Gov. 95-3037
Summary of Motor Traffic Flow Studies

The Motorists' Case FOR A CENTRAL TRAFFIC ARTERY



RED – EXISTING STATE BUILT ARTERIES
BLACK – THE CENTRAL TRAFFIC ARTERY

- Freely-moving motor vehicle traffic is the life-stream of the Commonwealth. . .
- Traffic congestion means waste—of time, of material, of man-power, of money. . .
- The Commonwealth's industrial progress and its share in National Defense alike require that traffic congestion at the state's business centre be eliminated by immediate construction of the needed highway link—a CENTRAL TRAFFIC ARTERY. . . .

Gov Doc

¶In January, 1941, a group of citizens petitioned the Massachusetts Legislature for legislation

> "authorizing the laying-out and constructing of a central traffic artery and other related thoroughfare improvements in and near the City of Boston and for such other, further or similar legislation, if any, as may be necessary or advisable to carry out the objects and purposes referred to."

¶The draft of bill (Senate No. 592) attached to the citizens' petition embodied the principles outlined in this pamphlet. Amendments to clarify and strengthen the bill will be offered during the course of public hearings before Legislative Committees.

¶The bill, as so filed and amended, is referred to as the "Central Traffic Artery Bill."

¶Among public, civic, and other organizations which, prior to April 1, had approved the principles of the Central Traffic Artery Bill are: State Planning Board of the Commonwealth of Massachusetts, Division of Metropolitan Planning of the Commonwealth of Massachusetts, Planning Board of the City of Boston, Massachusetts State Federation of Labor, Boston Chamber of Commerce, Massachusetts State C. I. O. Industrial Union Council, Massachusetts Selectmen's Association, Boston Fruit and Produce Exchange, Boston Central Labor Union, Retail Trade Board, Boston Society of Architects, Roslindale Board of Trade, Boston Society of Landscape Architects, Engineering Societies of New England, South End Joint Planning Committee, Consumers League of Massachusetts, Roxbury Joint Planning Committee, United Improvement Association, Boston Automobile Club, New England American Automobile Association Clubs, Massachusetts Real Estate Exchange, Teamsters Joint Council No. 10 (state-wide), Central Labor Union of New Bedford, Central Labor Union of Cambridge, Central Labor Union of Lawrence, Boston Real Estate Exchange, Mayors' Club of Massachusetts, West Roxbury Catholic Men's Club, West Roxbury Joint Planning Board, Brook Farm Civic Association.

WPA PROJECT 18151, "SURVEY OF BOSTON MET. DIST., etc"

More Boston Traffic Relief By State Research Group Aim

Monitor — Published June 6, 1940

Calling attention to a Works rogress Administration report on hich more than 50 men have ent 18 months' study, the Bos- n Municipal Research Bureau day urged a legislative recess mmission to recommend more ighway Fund help for through affic arteries in Boston and sur- unding communities.

The WPA report demonstrates, e Bureau says, that "if state aid sewhere in 1935 had been the le criterion, Boston's actual sub- dy of about $1,000,000 in that ar would have been increased some $4,000,000 on the per pita basis, and to about $6,400,- 0 on the valuation basis."

"Apparently the Commonwealth s avoided the populous, high lue center where traffic concen- ates," the Bureau finds. "Its funds ve gone to development of a gl.way network which either irts or stops short of urban cen- rs, especially Boston. . . . Con- nuance of state policy on this sis would mean that through city eets are not traffic arteries. It uld also imply that local traffic ngestion could never justify state d. Either viewpoint is utterly un- hable."

The Bureau offers a program for e guidance of the legislative re- ss commission now studying etropolitan affairs.

"In 1939 the General Court ac- pted the principle of State High- y Fund repair of every metro- litan boulevard. This responsi- ity ought to extend to all arterial ghways in the metropolitan area. ch highways might well be de- mined on the basis of a master plan establishing those which are connecting links through the urban regions or which serve the whole network of transportation.

"In addition to highway repair, there is the problem of providing new pavements as old surfaces wear out. Some highways in the metropolitan area have been re-surfaced on the 'Chapter 90' basis, under which the State matches contributions from the county and the individual city or town. Insofar as these and other highways are of an arterial character, they should be resurfaced entirely by the Highway Fund."

In support of its case for Highway Fund assistance, the Bureau produces figures from the WPA report showing a heavy concentration of automobile traffic in the Boston region.

The Bureau's fact-finding study, together with the WPA report, throw added weight behind the program of traffic relief now approaching completion under direction of Mayor Maurice J. Tobin's Conference on Traffic. Seeking to solve the problem of traffic congestion in Boston by obtaining extensive State aid, the Conference is perfecting a program for presentation to the 1941 session of the Legislature.

Those advancing this program insist that Boston should not be a "no-man's-land" for State highway aid, since much of its traffic comes from suburban communities or elsewhere in the State. Thousands of Boston's daily motorists are commuters who skim over smooth highways to the City limits, and then find themselves lost in a maze of tangled traffic, it is contended.

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By State Research
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A CENTRAL TRAFFIC ARTERY

INTRODUCTION

¶Civilized society has always required, and will in the future require, population centers for trading, for business, and for pleasure.

Decentralization and centralization are merely phases in the social development of the Commonwealth.

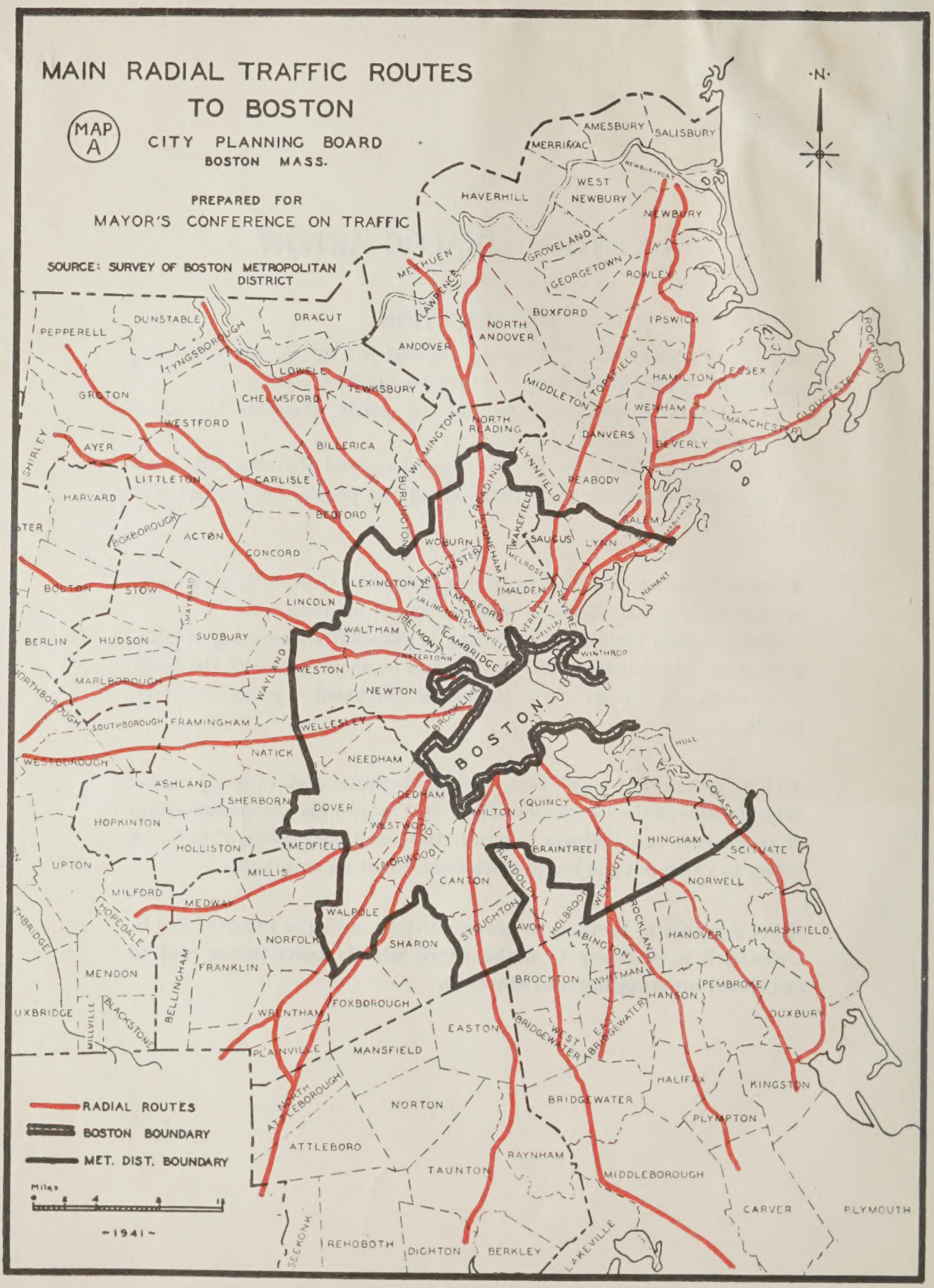
Rational control of these phases by governmental planning and action is necessary to protect the welfare of all the people, both urban and rural.

¶Motor vehicle transportation in this Twentieth Century is a primary, integral force in the scheme of industry and of life itself.

Motor vehicle traffic, freely moving in constantly increasing volume, is vital to the existence of the trading and business centers of the Commonwealth. It carries their stream of life-blood — goods, business, people.

¶How government shall best control, increase and expedite motor vehicle traffic in the Commonwealth's vital zone of highest concentration of population and business requires study and then prompt, effective action to carry out the recommendations based on such study.

¶For a people to continue to grow and to be strong in industry and in Defense, it is necessary to **make more wheels turn faster and to cut down on stopping and starting.**


MAIN RADIAL TRAFFIC ROUTES TO BOSTON
MAP A
CITY PLANNING BOARD
BOSTON MASS.
PREPARED FOR
MAYOR'S CONFERENCE ON TRAFFIC
SOURCE: SURVEY OF BOSTON METROPOLITAN DISTRICT
N
AMESBURY
SALISBURY
MERRIMAC
HAVERHILL
WEST NEWBURY
NEWBURY
GROVELAND
GEORGETOWN
ROWLEY
METHUEN
LAWRENCE
BOXFORD
NORTH ANDOVER
ANDOVER
IPSWICH
ESSEX
HAMILTON
WENHAM
MANCHESTER
GLOUCESTER
ROCKPORT
MIDDLETON
TOPSFIELD
DANVERS
BEVERLY
PEABODY
SALEM
LYNN
SAUGUS
NAHANT
WAKEFIELD
LYNNFIELD
NORTH READING
READING
WILMINGTON
BURLINGTON
WOBURN
STONEHAM
MELROSE
MALDEN
MEDFORD
SOMERVILLE
REVERE
WINTHROP
CHELSEA
CAMBRIDGE
BELMONT
WATERTOWN
ARLINGTON
LEXINGTON
WALTHAM
LINCOLN
CONCORD
BEDFORD
BILLERICA
CHELMSFORD
TEWKSBURY
LOWELL
DRACUT
DUNSTABLE
PEPPERELL
TYNGSBOROUGH
GROTON
WESTFORD
AYER
SHIRLEY
HARVARD
LITTLETON
CARLISLE
ACTON
BOXBOROUGH
STER
BOLTON
STOW
MAYNARD
SUDBURY
BERLIN
HUDSON
MARLBOROUGH
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WAYLAND
WESTON
NEWTON
WELLESLEY
BROOKLINE
BOSTON
NATICK
NEEDHAM
WESTBOROUGH
ASHLAND
SHERBORN
DOVER
DEDHAM
WESTWOOD
MILTON
QUINCY
HULL
COHASSET
HOPKINTON
HOLLISTON
MEDFIELD
THORNDIKE
BRAINTREE
HINGHAM
SCITUATE
UPTON
MILLIS
CANTON
NORWELL
MILFORD
MEDWAY
HOPEDALE
WALPOLE
NORFOLK
SHARON
STOUGHTON
AVON
HOLBROOK
ABINGTON
ROCKLAND
HANOVER
MARSHFIELD
THBRIDGE
MENDON
FRANKLIN
BELLINGHAM
BROCKTON
WHITMAN
HANSON
(PEMBROKE)
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
EASTON
BRIDGEWATER
WEST BRIDGEWATER
EAST BRIDGEWATER
DUXBURY
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
TAUNTON
RAYNHAM
MIDDLEBOROUGH
CARVER
PLYMOUTH
SEEKONK
REHOBOTH
DIGHTON
BERKLEY
LAKEVILLE
RADIAL ROUTES
BOSTON BOUNDARY
MET. DIST. BOUNDARY
Miles
0
4
8
12
-1941-

Purpose of the Proposed Legislation

¶The purpose of the Central Traffic Artery Bill is —

> **to provide for the free flow of state-wide traffic to, from and through the chief business and trading centre of the Commonwealth.**

¶To achieve this purpose and to remedy state-wide traffic's greatest bottle-neck, the bill provides eight related thoroughfare improvements in and near Boston, the breadbasket of the Commonwealth. The detail of these improvements and their estimated cost is explained in the Appendix. See Map B, included in the Appendix.

Briefly stated, the bill seeks to link up through Boston on an express highway (like the Pulaski Skyway in New Jersey or the West Side Express Highway in New York City) the great north-south traffic arteries previously built by the Commonwealth to the edges of the city. See Map A, facing. Ramps will lead down from the overhead express route to focal trading centers and main connecting arteries (like Sumner Tunnel). Surface intersections with other thoroughfares will be under-passed or over-passed. In this way: (a) traffic which wants to get **through** and **out** of the city will be able to do so in less than a quarter of the time it now takes; (b) traffic which wants to get **into** the city to do business — or to go to hotels, theatres, or the like — will be able to get to central zones, by the ramp descents, more than four times as quickly as now.

¶The Central Traffic Artery, and related thoroughfare tie-ins, will particularly benefit motor trucking. The big truck is a major business factor, indispensable to quick, effective transport. What moves the big truck rapidly along the road boosts business, because truck traffic congestion, with constant stopping and starting, increases accident risk, wear on driving personnel, and vehicle depreciation,— all of which lessens efficiency, raises operating costs, and reduces business profits which are reflected in wage rates. The Central Traffic Artery is planned to **eliminate** the worst truck traffic congestion in Massachusetts.

¶The Central Traffic Artery **will make more wheels turn faster and cut down on stopping and starting.**

I. THE STATE'S TRAFFIC PROBLEM RELATED TO BOSTON

¶In his 1941 Inaugural Message, Governor Saltonstall related the state-wide traffic problem of Massachusetts to the City of Boston:

> "Within the circumference of thirty miles of the State House, about three million of our 4,300,000 population live. Boston is the breadbasket that supports the great majority of these homes. Boston's future becomes a problem of the State . . . (Boston has) a serious traffic problem which the State cannot ignore. Free moving traffic of all kinds is a fundamental requirement for a good business center and the entire area of which it is the heart."

¶The area surrounding Boston forms the fifth largest population center in the United States:

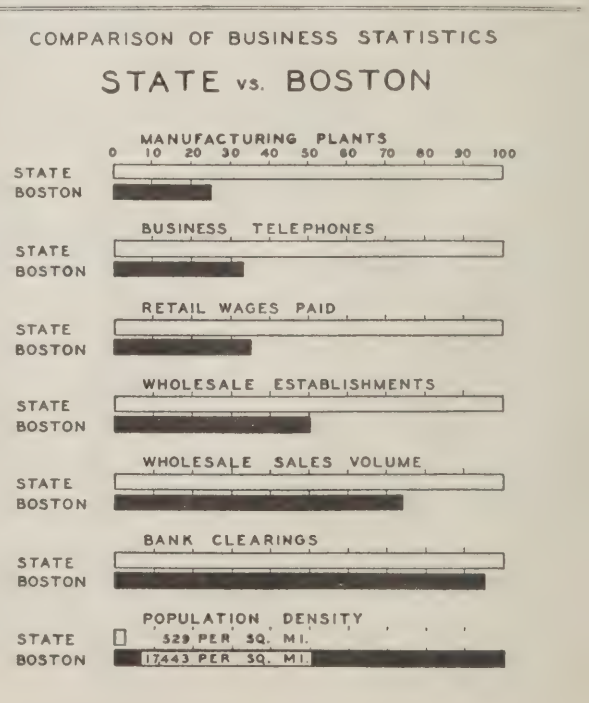
Extent of Metropolitan Area Measured from State House	Number of Municipalities Included	Area in Square Miles	Population (1935 Census)	Property Valuation for State Tax (1935)
15 mile radius.....	61	687.2	2,174,289	$4,130,240,971
20 mile radius.....	88	1,172.8	2,372,002	$4,435,337,486
25 mile radius.....	124	1,835.8	2,735,258	$4,857,844,932
30 mile radius.....	150	2,392.0	2,921,466	$5,070,362,841

In this great metropolitan area live 70% of the Commonwealth's citizens, are registered well over half of the State's motor vehicles, and is located over 73% of the State's taxable property.

¶The old City of Boston, at the heart of this densely-populated area, is the natural business, trading, and pleasure center of the whole Commonwealth (and, in fact, of central New England):

- In Boston are located over 1/4 of the state's manufacturing plants, over 1/2 of the state's wholesale business establishments.
- Boston has over 1/3 of the state's business telephones.
- Retail wages paid in Boston are 35% of the state's total.
- Boston's wholesale sales volume is 74% of the state's total.
- Boston's bank clearings are 96% of the state's total.
- Boston's population density is 17,443 persons per square mile, as compared with 529 persons per square mile throughout the state.

¶The Port of Boston (1940 dollar volume of exports and imports $188,000,000 — a 50% increase over 1938) ranks as one of the top three American ports. It is the world's wool center, receiving weekly importations of 12,500,000 pounds. The number of ships bringing goods from South America to Boston has quadrupled in the past year. Boston serves as ocean gateway to the whole Commonwealth. Substantially all marine freight for Massachusetts, and in fact for New England, is landed at Boston wharves and trans-shipped by rail and motor truck to the state's cities and towns. This freight cannot be landed and trans-shipped at any other Massachusetts port. The stifling traffic congestion along Boston's Atlantic Avenue waterfront is now such that a large truck takes 35 minutes to cover one mile, with resulting wastage of time and money to industrial shippers and consignees throughout the whole state. As ocean traffic continues to increase by leaps and bounds, this traffic tie-up will intensify.



¶Boston is a key city in National Defense. The Charlestown Navy Yard, a principal establishment of the United States Navy, in three years has tripled its employed personnel to some 15,000 hands. The Navy's Graving Dock in South Boston is the largest in North America, and large federal appropriations for immediate expansion of its facilities are being granted. The Army Base in South Boston is the supply source for Fort Devens, Camp Edwards, and the State Coast Defenses, where over 50,000 soldiers will be trained, housed, fed, and equipped. Prompt motor transport access to and egress from Boston in connection with these National Defense facilities is essential to their proper, effective functioning. The lesson learned by America in the last months of the Great War was that at whatever cost **motor traffic must be kept moving.**

The Commanding General of the First Corps Area and the Commandant at the Charlestown Navy Yard have both reported to Washington that the Central Traffic Artery proposals may properly be regarded as a local undertaking for National Defense.

II. STUDIES MADE AS TO TRAFFIC CONGESTION IN BOSTON

¶Boston, as shown above, is the business and population center of the Commonwealth, with over a million and a half non-resident people pouring into its jam-packed downtown area each working day. Three additional factors have contributed to swamp its traffic facilities:

(1) The enormous increase in motor vehicle transportation during the last two decades. Motor vehicle registrations in the United States of America have tripled to 30,000,000 since 1920 and vehicle-miles traveled are six times what they were in 1920.

(2) The city's crooked, narrow streets, especially in its centuries-old commercial districts where the bulk of business and industry centers.

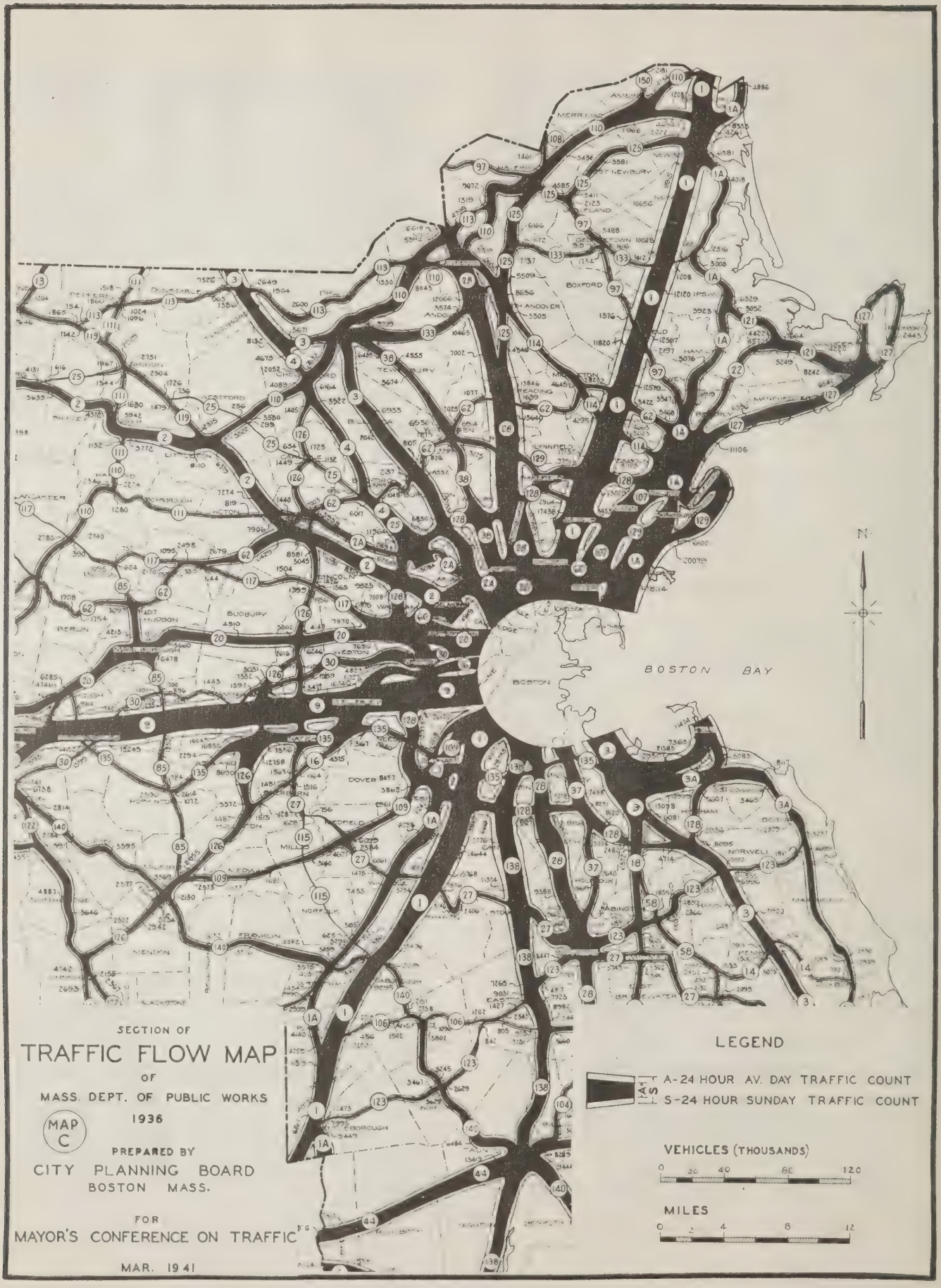
(3) The construction throughout the Commonwealth of great and small traffic arteries that stop short at the city limits of Boston and from there funnel into the old city a constantly increasing volume of motor vehicles. See Flow-Map C, page 6.

¶During the last twenty years this traffic congestion has been studied and restudied:

(1) **1923.** "Intermediate Thoroughfare Report" by the City Planning Board, submitted to the Legislature and in 1925 approved by Special Recess Commission. The solution proposed in this Report was a new north-south traffic artery from the Charles River Dam (north) to Albany Street (south).

(2) **1927–1930.** The "Whitten Report", a comprehensive three-year study by an expert engineer employed by the City of Boston. The solution proposed in this Report was a central artery, generally similar to the Intermediate Thoroughfare and to the Central Traffic Artery here outlined.

(3) **1938–1940.** "Survey of Boston Metropolitan District and Adjacent Areas", W. P. A. Project 18151, sponsored by the Massachusetts State Planning Board, for use as a factual basis by the Special Legislative Commission appointed by c. 71, Acts of 1938.


SECTION OF
TRAFFIC FLOW MAP
OF
MASS. DEPT. OF PUBLIC WORKS
1936
MAP C
PREPARED BY
CITY PLANNING BOARD
BOSTON MASS.
FOR
MAYOR'S CONFERENCE ON TRAFFIC
MAR. 1941
LEGEND
A-24 HOUR AV. DAY TRAFFIC COUNT
S-24 HOUR SUNDAY TRAFFIC COUNT
VEHICLES (THOUSANDS)
0 20 40 60 120
MILES
0 2 4 8 12
N
BOSTON BAY
BOSTON
CHELSEA
EVERETT
MALDEN
MEDFORD
REVERE
WINTHROP
QUINCY
MILTON
DEDHAM
NEEDHAM
NEWTON
BROOKLINE
WELLESLEY
WESTON
WALTHAM
BELMONT
ARLINGTON
LEXINGTON
BEDFORD
CONCORD
LINCOLN
SUDBURY
WAYLAND
FRAMINGHAM
NATICK
SHERBORN
MILLIS
NORFOLK
FRANKLIN
HOPKINTON
HOLLISTON
MEDFIELD
DOVER
WELLESLEY
WESTON
NEWTON
BROOKLINE
BRIGHTON
ROXBURY
DORCHESTER
MILTON
QUINCY
HINGHAM
HULL
COHASSET
SCITUATE
MARSHFIELD
DUXBURY
PEMBROKE
HANOVER
NORWELL
HANSON
ABINGTON
ROCKLAND
HINGHAM
WEYMOUTH
BRAINTREE
HOLBROOK
RANDOLPH
CANTON
STOUGHTON
AVON
BRIDGEWATER
EAST BOROUGH
WEST BOROUGH
RAYNHAM
TAUNTON
MANSFIELD
NORTON
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
SOMERSET
DIGHTON
BERKLEY
FREETOWN
LAKEVILLE
MIDDLEBOROUGH
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ROCKLAND
ABINGTON
WHITMAN
HANSON
HALIFAX
PLYMPTON
CARVER
KINGSTON
PLYMOUTH
BOURNE
SANDWICH
FALMOUTH
MASHPEE
BARNSTABLE
YARMOUTH
DENNIS
HARWICH
CHATHAM
ORLEANS
EASTHAM
WELLFLEET
TRURO
PROVINCETOWN
BREWSTER
ORLEANS
EASTHAM
WELLFLEET
TRURO
PROVINCETOWN
MERRIMAC
NEWBURYPORT
WEST NEWBURY
GEORGETOWN
ROWLEY
IPSWICH
HAMILTON
WENHAM
BEVERLY
DANVERS
PEABODY
SALEM
MARBLEHEAD
SWAMPSCOTT
LYNN
SAUGUS
LYNNFIELD
NORTH READING
READING
WILMINGTON
BILLERICA
TEWKSBURY
ANDOVER
NORTH ANDOVER
METHUEN
LAWRENCE
BOXFORD
GROVELAND
HAVERHILL
NORTH ANDOVER
ANDOVER
TEWKSBURY
BILLERICA
CHELMSFORD
WESTFORD
LITTLETON
BOXBOROUGH
HARVARD
STOW
MAYNARD
ACTON
CONCORD
LINCOLN
SUDBURY
WAYLAND
WESTON
NEWTON
BROOKLINE
BRIGHTON
ROXBURY
DORCHESTER
MILTON
QUINCY
HINGHAM
HULL
COHASSET
SCITUATE
MARSHFIELD
DUXBURY
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HANOVER
NORWELL
HANSON
ABINGTON
ROCKLAND
HINGHAM
WEYMOUTH
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HOLBROOK
RANDOLPH
CANTON
STOUGHTON
AVON
BRIDGEWATER
EAST BOROUGH
WEST BOROUGH
RAYNHAM
TAUNTON
MANSFIELD
NORTON
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
SOMERSET
DIGHTON
BERKLEY
FREETOWN
LAKEVILLE
MIDDLEBOROUGH
PLYMPTON
CARVER
KINGSTON
PLYMOUTH

(4) **1940.** "Report to the Legislature of Special Legislative Commission" above referred to, filed with the Legislature in 1941, the conclusions of which are quoted below:

> "In any discussion of the highway needs of the Metropolitan District, one factor stands out: the traffic congestion in downtown Boston. The lack of adequate arteries at the economic centre of the Metropolitan area is beyond question the most important highway problem before the Metropolitan District. Good roads approach Boston from all directions but these State arteries, which pass through the various suburban towns, terminate at the City of Boston limits. This means the traffic from all points of the compass converges upon the business heart not only of the Metropolitan District but the State and indeed New England. Wide four-to-eight-lane boulevards funnel traffic to the City's limits, but at this point of concentration adequate facilities to handle this bulk of traffic do not exist. The City of Boston, for reasons which will be discussed, has been unable to provide the arterial highways needed by the State and the District at the seat of economic, social and governmental activity. This Commission believes, unquestionably, that the problem in Boston is State and Regional rather than local and that it should be dealt with on that understanding . . .
>
> "It is clear that originally the Highway Fund aimed to build the main through routes in the rural sections by which to facilitate traffic between our cities and towns and across the State from neighboring states. This need has to a very substantial extent been met and the critical traffic problems are now within the cities at the points of maximum congestion.
>
> "Heretofore, these have been left to the local authorities to be constructed at local expense. This has become peculiarly serious in Boston where the point of greatest congestion could not be relieved, as in other communities, by means of by-pass thoroughfares built by the Highway Fund. In Boston the solution must inevitably involve traffic facilities into and through the heart of the City. These are obviously important elements of the major thoroughfare plan of the region. They appear to be arteries that should be financed by the Highway Fund.
>
> "During the past 15 years there has been a steady increase in the proportion of the State highway funds expended both by the Metropolitan District and Boston proper for highways. Expenditures in the Metropolitan District (Zone B) almost steadily increased from 21.5% to 43.9% of the total expenditures in all four zones — Boston proper, the Metropolitan District, Greater Boston, and all towns beyond within a radius of 30 miles of the State House. In Boston, however, expenditures were less than 1% up to 1930 and subsequently increased to just over 8%. This obviously is quite out of line in relation to the intensity of the traffic problem and the local contribution to the gas-tax fund.

"This Commission feels that the facts developed in the above (W. P. A.) Survey support what appears to have been a growing conviction in the minds of many — that substantial funds should now and for the immediate future be allocated from the Highway Fund for the construction of the major arteries within and adjacent to the City of Boston needed for the interconnection of the radial routes now leading from all directions to the City limits and which must be carried into and across the City in a properly coordinated and adequate system, if the Metropolitan area is to be adequately served.

"This involves the interests of the population of the Metropolitan area — as well as those of Boston — because 60% of the Boston traffic originates in the other 42 cities and towns which comprise the Metropolitan District. The entire region and, of course, the State as well, will be benefited by these traffic improvements, not merely Boston. They will serve an area that produces half, or thereabout, of all the traffic in the State. It is, therefore, reasonable that the gas-tax moneys provided largely by this area should be used to provide these essential traffic routes."

(5) **1940.** "Report to the Legislature of Division of Metropolitan Planning, Commonwealth of Massachusetts." This report refers to the eight projects included in the Central Traffic Artery Bill, as having been studied and recommended by the Division, and concludes:

"With all of these recommendations and particularly the Central Artery and its related street improvements, this Division heartily concurs."

(6) **1940-1941.** "The Mayor's Conference on Traffic." From this study by eighteen civic organizations, the State Planning Board, the Division of Metropolitan Planning, the City Planning Board, various City Departments, and the Boston Elevated Railway, intensively carried on throughout 1940, developed the Central Traffic Artery Bill as filed with the Legislature.

¶These painstaking and repeated studies, and related surveys, establish the following facts beyond reasonable doubt:

(1) In the **one square mile of downtown Boston,** bounded by Charles Street, Park Square, Stuart Street, Kneeland Street, Fort Point Channel, Boston Harbor and the Charles River, passenger motor vehicles entering and leaving during the period from 7 A. M. to midnight have increased:

1927 — 171,531
1939 — 267,118
1940 — 283,000 (estimated on basis of registration increase.)
1941 — 310,000 (estimated on basis of apparent registration increase.)

(2) Of the total passenger motor vehicles on Boston streets on a given day, only 33.5% are Boston cars. The remaining 66.5% originate from outside of Boston.

(3) About 30% of the total motor vehicles on downtown Boston streets on a given day are seeking through-passage. Being unable to by-pass the city, these thousands of vehicles are forced to struggle for passage through the square mile of downtown Boston, where traffic density is as heavy as anywhere in America.

(4) During recent years the City of Boston has expended great sums, raised from local taxation, on construction and improvements to relieve the traffic congestion within its limits,— for example, Stuart Street widening, Cambridge Street widening, Dock Square, Cross Street widening, Haymarket Square, Sumner Tunnel, Kenmore Square, Massachusetts-Commonwealth Avenues underpass, Centre Street traffic circle, Jamaica Pond traffic circle, Exchange Street widening, Charles Street widening.

15-year total expenditures for construction, improvement, and maintenance	Highway Fund	Funds raised by local taxes
In Boston.....	$4,820,000	$102,742,000
In balance of Metropolitan District.....	$29,181,000	$144,379,000

Thus, in the balance of the Metropolitan District the State spent $1 for each $5 of local tax-money expended; whereas in Boston, the State spent $1 for each $20 of local tax-money expended. **Boston has much more than carried its own load.**

(5) These are major bottle-necks in the State's most congested traffic area:

State Street — a natural dam blocking north-south traffic.

Albany Street (between Broadway and Kneeland Street) — clogged by railway express use and difficult of access and egress.

Blue Hill Avenue (north of Seaver Street) — a narrow, winding, congested local business street.

These bottle-necks will be remedied by the limited-access express routes of the Central Traffic Artery and the Blue Hills Radial, with related thoroughfare tie-ins.

¶The conclusions of all the foregoing studies are fundamentally the same:

(a) The worst motor traffic congestion in the Commonwealth is in Boston.

(b) To cure this congestion an express motor highway should be built to link through the City of Boston the north and south traffic routes already built to the edges of the city.

(c) As this improvement will benefit motorists throughout the Commonwealth, its cost should be borne by the fund created by motorists — the Highway Fund. The Highway Fund now exceeds $31,000,000 per year and has totalled in the last decade nearly $300,000,000.

III. REMEDIES FOR BOSTON TRAFFIC CONGESTION

¶Three remedies are provided for the situation described above:

(1) The Central Traffic Artery Bill (Senate No. 592), providing for the rapid ingress and egress of traffic and for express traffic routes on which no parking will be permitted and entrance to and exit from which will be at limited points.

(2) The Off-street Parking Facilities Bill (House No. 1636), providing for increased facilities for downtown parking under public regulation, to the end that it will be possible to accommodate **off the streets** a much heavier volume of parked cars.

(3) The Mayor's Parking Survey Committee, appointed in January, 1941, to study and recommend procedures which, in conjunction with the carrying into effect of the foregoing legislation, will reduce street parking to a minimum.

¶The Central Traffic Artery expenditures, being for the benefit of state-wide motorists, would be financed from the Highway Fund created by such motorists. The costs in regard to the other two remedial measures, being more local in application, would be borne by the City of Boston.

IV. PROCEDURE TO CARRY INTO EFFECT THE CENTRAL TRAFFIC ARTERY PROPOSALS

¶Mayor Tobin has stated that it would be appropriate, and entirely acceptable to Boston: (a) that the Central Traffic Artery projects be carried out under an Authority, the majority of the members of which should be appointed by Governor Saltonstall, and (b) that the definitive planning, final costing and actual building of the projects should be done by the State Department of Public Works. No project would be commenced under the Bill until the definitive plan and the final cost estimate had been approved by the Governor of the Commonwealth and the Mayor of Boston.

¶To finance the cost of the projects the City of Boston would issue from time to time its bonds, serially retireable over a twenty-year period. These bonds would bear upon their face the statutory pledge by the Commonwealth of the Highway Fund, and its undertaking to make payments, to the extent annually required (beginning in 1943) to meet debt service requirements of the bonds. The amount of the annual debt service requirement would, obviously, depend on the interest rate at which the bonds might be sold, but the maximum requirement should not exceed in any year $1,350,000 and might be considerably less.

¶The existing estimates of cost of the several projects (indicated in the Appendix in parenthesis after each project) have been carefully worked out by the City Planning Board in the regular manner for costing similar projects in the preliminary stage:

(a) The route of the Central Traffic Artery has been assumed in a definite location, according to what appears best from the traffic angle and most economical as regards cost. Flexibility in final lay-out, carefully anticipated in the bill, will obviate any "hold-up" by land-owners. Several alternative routes are equally acceptable.

(b) Land damages for all projects have been based on 1940 assessed values, many of which reflect substantial abatements granted in recent years. Each parcel that might be taken or purchased, in whole or in part, has been separately valued, and a percentage allowance (25%) added for safety. To safeguard further against "hold-ups", the bill provides that 50% of any profit accruing from the taking of land acquired within three years must be paid over to the Commonwealth to retire Central Traffic Artery bonds.

(c) Road construction for all projects — quantities of the various elements involved have been calculated; unit prices (worked out with the City's Public Works Department) have been applied thereto; and a percentage allowance (15%) has been added for contingencies.

(d) Overhead express highway — estimates based on known costs of other elevated structures and on conferences with engineers have developed a unit cost per linear foot without ramps ($370). The cost of the ramps has been separately computed and added.

It is obvious that further costing until the projects are definitely committed would not serve a useful purpose. The public interest is fully safeguarded by the statutory procedure first indicated in the first paragraph of Section IV.

¶The Atlantic Avenue Elevated Railway structure will be removed. It would be neither economical nor feasible to use any part of it for the purpose of the elevated motor highway of the Central Traffic Artery. This removal, to be undertaken in any event, will not add to the project's cost.

¶Three of the eight items contained in the Central Traffic Artery Bill involve the jurisdiction of the Metropolitan District Commission.

APPENDIX

NOTE—*The following description of the projects involved in the Central Traffic Artery Bill is subject to revisions and relocations of the several projects, as provided in the Bill.*

I. Central Traffic Artery ($10,500,000):

The Artery consists of a surface highway, connecting the Charles River Dam at Charles Street on the north with Albany Street on the south, and an elevated motor highway superimposed above such surface highway for the major part thereof.

The surface highway will have six traffic lanes, three on each side of the single center-road supports of the elevated motor highway. The elevated motor highway will have four traffic lanes. From the elevated motor highway, in addition to the terminal ramps near Cotting Street (north end) and Dover Street (south end), ramps will lead down to focal points and important connecting routes near Haymarket Square, near State Street, and near Kneeland Street.

The portion of the Artery already built by City funds includes the Circle at Haymarket Square and the widened Cross Street from Haymarket Square to Clinton Street, serving the portal of the Sumner Tunnel. The elevated motor highway from Albany Street to the Tunnel and beyond provides essential service not only to the immediate downtown area, but to the through traffic from Albany Street on the south and from Charlestown and the Charles River Dam on the north.

The route of the Artery starts at the traffic circle at the Charles Street end of the Dam. Leverett Street and Merrimac Street are widened to form a surface thoroughfare from the Dam to Haymarket Square. At about 1,000 feet from Charles Street in the vicinity of Cotting Street, the inclines to the elevated roadway start, continuing along Merrimac Street and across the centre of the circle at Haymarket Square to a double set of ramps on Cross Street between Haymarket Square and Hanover Street. Cross Street is further widened in this section to accommodate these ramps. These ramps will afford service to and from the elevated structure for traffic in the North Station section and for Charlestown traffic.

At the entrance to the Tunnel a circularization of traffic is accomplished by the widening of neighboring streets. This circularization of traffic will prevent congestion that might otherwise be involved by traffic to and from the ramps to the elevated thoroughfare at this point.

From Clinton Street the Central Artery continues along Mercantile Street and across State Street, with another double set of ramps beyond State Street, and thence continues to Atlantic Avenue in the vicinity of Broad Street. From this point the elevated structure continues along Atlantic Avenue, without any widening, to Kneeland Street, at which point there will be a single pair of ramps permitting connection between the elevated structure and Kneeland Street. The elevated structure then crosses the Boston and Albany freight yards or adjacent property and over Broadway at Albany Street, coming down into Albany Street between Broadway and Dover. Albany Street will be adequately widened at this point.

ARLINGTON
MEDFORD
MALDEN
REVERE
EVERETT
CHELSEA
BELMONT
SOMERVILLE
WINTHROP
WATERTOWN
CAMBRIDGE
BOSTON HARBOR
BROOKLINE
QUINCY
MILTON
DEDHAM
BLUE HILLS RADIAL
AM. LEGION HIGHWAY
VETERANS OF FOREIGN WARS PARKWAY
KEY
EXISTING
PROPOSED
MAIN ARTERIES
OTHER THROUGH ROUTES
EAST BOSTON TUNNEL
0 2000 4000 6000 8000 10000
SCALE IN FEET
OUTLINE MAP OF
BOSTON THOROFARE PLAN
EXISTING ROUTES AND PROPOSALS
CITY PLANNING BOARD
CITY OF BOSTON
MAP B
PREPARED FOR
THE MAYOR'S CONFERENCE
ON TRAFFIC
1941

II. Blue Hills Radial ($3,800,000):

A necessary adjunct of the Central Artery is the Blue Hills Radial, which extends Blue Hill Avenue as a 120-foot wide express thoroughfare from Seaver Street to Albany Street near Massachusetts Avenue. The thoroughfare will be designed to prevent interruption by local street crossings by going under or over the main cross arteries and preventing any direct crossing of the intermediate secondary streets. The Radial will be a "limited access" way.

With this extension of Blue Hill Avenue to Albany Street completed, there will be direct access along Blue Hill Avenue and Albany Street to the end of the Central Traffic Artery, along its overhead way to the Tunnel and, beyond, to the Charlestown bridges and the Dam. Thus a direct route is provided to the downtown area for traffic from the south, much of which now comes into town by way of Morton Street, Jamaicaway, Fenway and the Back Bay. In developing the program, it will be desirable for the Blue Hills Radial to be completed simultaneously with the Central Traffic Artery in order to insure the fullest use of both.

III. Berkeley-Albany Streets Connection ($1,500,000):

Dover Street from Tremont Street to Albany Street is an important lead from Berkeley Street to the Dover Street Bridge and South Boston. With the Central Artery completed, this route will acquire an additional usefulness as a means of detouring from the South End and Back Bay to the Central Artery. The plan involves a widening along or near Dover Street from Albany Street to Tremont Street, with grade separations at Shawmut Avenue, Washington Street and Harrison Avenue.

See also Item VI.

IV. Rutherford Avenue ($1,500,000):

The Charlestown Bridge and the Warren Bridge, which are now in each case one-way traffic routes connecting Boston with City Square, constitute an important link for northbound traffic. From City Square traffic goes northwesterly along Rutherford Avenue to Sullivan Square, from which several main traffic routes radiate. Rutherford Avenue is, therefore, important in the main traffic routes to and from the north. It is proposed to widen Rutherford Avenue to a width of not less than 86 feet with a small circular traffic connection at the Prison Point Bridge.

V. Dorchester Avenue Widening ($450,000):

Dorchester Avenue between Broadway and Old Colony Avenue is obstructed by the unused entrance to the subway and is inadequate to take the combined traffic of both Dorchester Avenue and Old Colony Avenue.

It is proposed to remove the entrance to the subway which is no longer needed and to widen the avenue to a total width of 120 feet. In addition the corner of Macallen Street, where outbound travel turns into Dorchester Avenue, will be eased with a small angle taking at the corner. Similarly the angle at Dover Street will be eased to facilitate traffic at that point.

*VI. Embankment Road Extension ($250,000):

One of the most difficult traffic points in Boston is at the corner of Beacon Street and Embankment Road where the sharpness of the corner makes traffic turns difficult and causes substantial backing up of traffic during traffic peaks.

* Metropolitan District Commission thoroughfare improvement.

It is proposed to extend a double driveway adequate to take two lanes of vehicles in each direction from Embankment Road parallel to Back Street, between it and the main broad granolithic walk, connecting with Berkeley Street and Clarendon Street. Both driveways will continue as far as Berkeley Street and one driveway from Berkeley Street to Clarendon Street. Berkeley Street between Beacon Street and Back Street will be widened but no widening is necessary at Clarendon Street.

*VII. American Legion Highway Extension ($1,000,000):

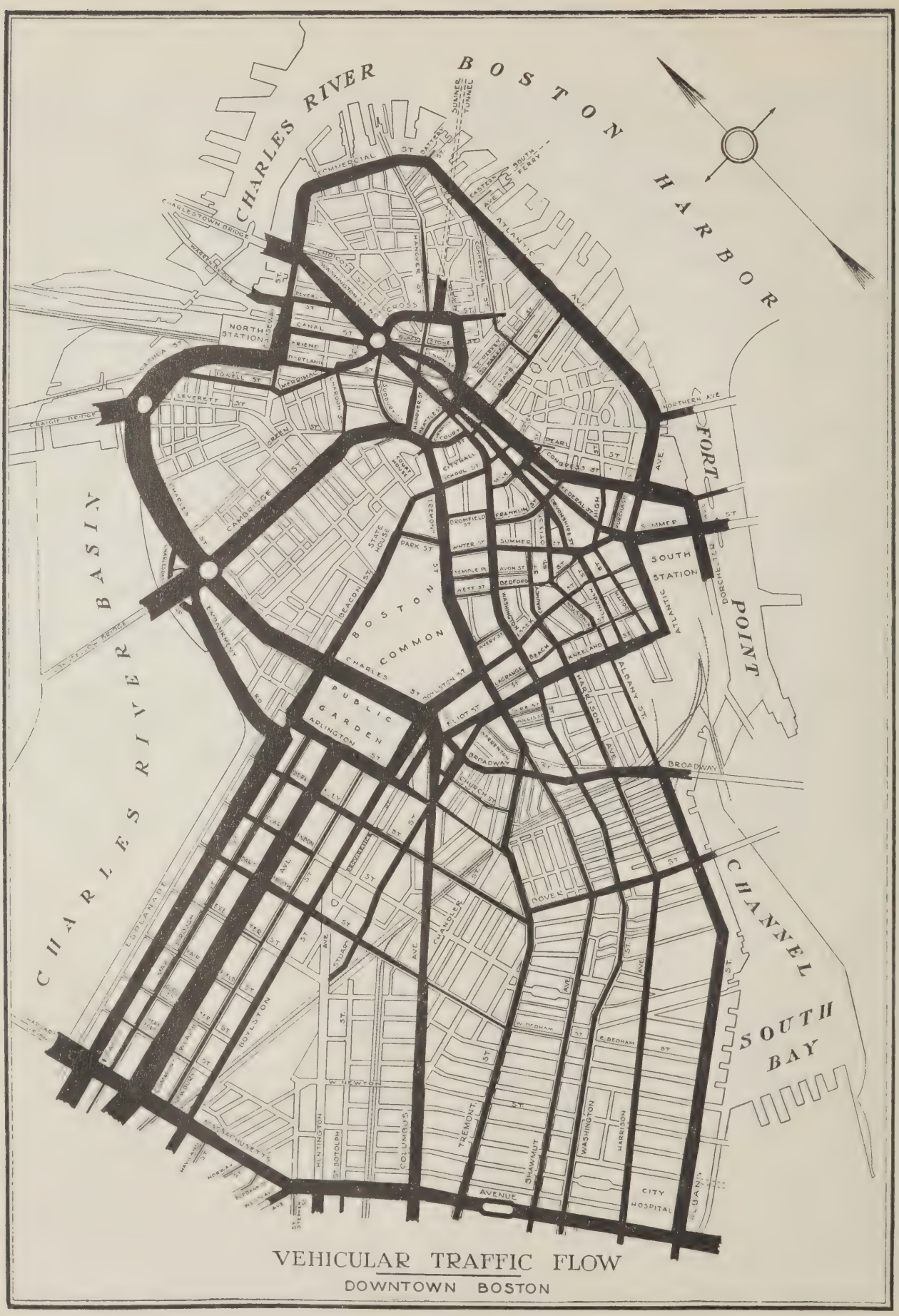
The American Legion Highway extends from Blue Hill Avenue at Franklin Park to Cummins Highway. The Whitten Report contemplated the extension of this parkway to Washington Street at the West Roxbury Parkway. This extension is included as an important item in the full development of the usefulness of the Central Traffic Artery. Traffic can now reach downtown Boston by way of the West Roxbury Parkway, Centre Street and Jamaicaway. Much of this traffic can advantageously be re-routed via the American Legion Highway and Blue Hills Radial to the Central Traffic Artery, if Washington Street and the end of the American Legion Highway at Cummins Highway are connected by an adequate roadway.

Much of the difficulty in Boston traffic at present is the mingling of traffic from both the south and the west in the Back Bay, traffic being thence forced through the retail trade district or over Beacon Hill to get to the downtown area or through the city. The development of the projects included in this program will offer to all traffic from the south a convenient route directly to or by the downtown area over the Blue Hills Radial and the Central Traffic Artery. This program should provide substantial relief to traffic congestion in the Back Bay and the retail trade area, and enable through traffic to pass rapidly into and out of the city limits.

*VIII. Gerry's Landing Bridge ($400,000):

This project will facilitate westerly traffic to, from, and through Boston. It will overcome congestion at Harvard Square and elsewhere in Cambridge. The bridge is partly in Boston and partly in Cambridge.

*Metropolitan District Commission thoroughfare improvement.



VEHICULAR TRAFFIC FLOW

DOWNTOWN BOSTON

Motor Traffic Rolls On . . . . . .

"In the next few months and years there will be in this country the largest highway traffic volumes, the most serious traffic conditions, and the greatest pressure for remedy of such conditions that we have ever witnessed. . .

. . . In the first place, highway transportation has risen to a new point of major importance in military operations. This was demonstrated with shocking clarity in Holland, France, and more recently in Africa. In Canada there is said to be one army motor vehicle to every 4 or 5 soldiers. We read that in the U. S. Army a quarter of a million trucks will soon be in service. Already huge convoy movements have taken place and we learn that this summer there will be the largest scale maneuvers ever undertaken. These will inevitably involve much highway transportation.

From a general military point of view, too, improvement of highway transportation in metropolitan areas is of great importance. It is important for convoys and other military movements to be able to pass through metropolitan areas reasonably direct and expeditiously. This isn't quite as simple a matter as one officer in the army expressed it. 'There will be no serious problem involved in going through cities at any time,' he said, 'because the military will merely "take over" the needed streets and go its way without any trouble or delay.' No, the problem isn't that simple. Much of the busy civilian traffic is also engaged in the important business of National Defense or in related essential activities. It's not 'pleasure traffic' or even **unimportant** local traffic. And it can't just be ignored; neither should it be neglected. What is needed, of course, is a planned program for maximum efficiency in handling necessary military movements with the least possible detriment to normal traffic.

From all points of view, metropolitan highway transportation problems warrant special attention and emphasis now."

—from "Metropolitan Traffic Troubles", in "1941 Public Works Engineers' Yearbook"—Burton W. Marsh, Consultant Engineer and Chairman APWA Committee on Traffic Control.

The Mayor's Conference on Traffic, April, 1941

CITY OF BOSTON PRINTING DEPARTMENT